**Amendment to the Specification**

**The Paragraph beginning at Page 1, lines 8-35, through to Page 3, lines 1-26, is to be deleted and replaced with the Paragraphs as follows:**

Co-pending Applications

Various methods, systems and apparatus relating to the present invention are disclosed in the following co-pending applications filed by the applicant or assignee of the present invention simultaneously with the present application:

| | | | | | |
|---|---|---|---|---|---|
| 10/815621 | 10/815612 | 10/815630 | 10/815637 | 10/815638 | 10/815640 |
| 10/815642 | 7097094 | 7137549 | 10/815618 | 7156292 | 10/815635 |
| 10/815647 | 10/815634 | 7137566 | 7131596 | 7128265 | 10/815641 |
| 10/815645 | 7175089 | 10/815617 | 10/815620 | 7178719 | 10/815613 |
| 10/815633 | 10/815619 | 10/815616 | 10/815614 | 10/815636 | 7128270 |
| 10/815609 | 7150398 | 7159777 | 10/815610 | 7188769 | 7097106 |
| 7070110 | 10/815629 | 10/815625 | 10/815628 | | |

The disclosures of these co-pending applications are incorporated herein by cross-reference.

Background of the Invention

IR absorbing dyes have numerous applications, such as optical recording systems, thermal writing displays, laser filters, infrared photography, medical applications and printing. Typically, it is desirable for the dyes used in these applications to have strong absorption in the near-IR at the emission wavelengths of semiconductor lasers (*e.g.* between about 700 and 2000 nm, preferably between about 700 and 1000 nm). In optical recording technology, for example, gallium aluminium arsenide (GaAlAs) and indium phosphide (InP) diode lasers are widely used as light sources.

Another important application of IR dyes is in inks, such as printing inks. The storage and retrieval of digital information in printed form is particularly important. A familiar example of this technology is the use of printed, scannable bar codes. Bar codes are typically printed onto tags or labels associated with a particular product and contain information about the product, such as its identity, price *etc*. Bar codes are usually printed in lines of visible black ink, and detected using visible light from a scanner. The scanner typically comprises an LED or laser (*e.g.* a HeNe laser, which emits light at 633 nm) light source and a photocell for detecting reflected light. Black dyes suitable for use in barcode inks are described in, for example, WO03/074613.

However, in other applications of this technology (*e.g.* security tagging) it is desirable to have a barcode, or other intelligible marking, printed with an ink that is invisible to the unaided eye, but which can be detected under UV or IR light.

An especially important application of detectable invisible ink is in automatic identification systems, and especially "netpage" and "Hyperlabel™" systems. Netpage systems are described in the following patent applications, all of which are incorporated herein by reference.

| | | | | | |
|---|---|---|---|---|---|
| 7156289 | 7178718 | 10/409845 | 09/575197 | 7079712 | 09/575123 |
| 6825945 | 09/575165 | 6813039 | 7190474 | 6987506 | 6824044 |
| 6980318 | 6816274 | 7102772 | 09/575186 | 6681045 | 6678499 |
| 6679420 | 6963845 | 6976220 | 6728000 | 7110126 | 7173722 |
| 6976035 | 6813558 | 6766942 | 6965454 | 6995859 | 7088459 |
| 6720985 | 09/609303 | 6922779 | 6978019 | 6847883 | 7131058 |
| 09/721895 | 09/607843 | 09/693690 | 6959298 | 6973450 | 7150404 |
| 6965882 | 09/608022 | 09/575181 | 09/722174 | 7175079 | 7162259 |
| 6718061 | 10/291523 | 10/291471 | 7012710 | 6825956 | 10/291481 |
| 10/291509 | 10/291825 | 10/291519 | 7031010 | 6972864 | 6862105 |
| 7009738 | 6989911 | 6982807 | 10/291576 | 6829387 | 6714678 |
| 6644545 | 6609653 | 6651879 | 10/291555 | 10/291510 | 10/291592 |
| 10/291542 | 7044363 | 7004390 | 6867880 | 7034953 | 6987581 |
| 10/291556 | 10/291821 | 7162269 | 7162222 | 10/291822 | 10/291524 |
| 10/291553 | 6850931 | 6865570 | 6847961 | 10/685523 | 10/685583 |
| 7162442 | 10/685584 | 7159784 | 10/804034 | 10/793933 | 7068382 |
| 7007851 | 6957921 | 6457883 | 10/743671 | 7094910 | 7091344 |
| 7122685 | 7038066 | 7099019 | 7062651 | 6789194 | 6789191 |
| 6644642 | 6502614 | 6622999 | 6669385 | 6827116 | 6549935 |
| 6987573 | 6727996 | 6591884 | 6439706 | 6760119 | 09/575198 |
| 7064851 | 6826547 | 6290349 | 6428155 | 6785016 | 6831682 |
| 6741871 | 6927871 | 6980306 | 6965439 | 6840606 | 7036918 |
| 6977746 | 6970264 | 7068389 | 7093991 | 7190491 | 6982798 |
| 6870966 | 6822639 | 6474888 | 6627870 | 6724374 | 6788982 |
| 09/722141 | 6788293 | 6946672 | 6737591 | 7091960 | 09/693514 |
| 6792165 | 7105753 | 6795593 | 6980704 | 6768821 | 7132612 |
| 7041916 | 6797895 | 7015901 | 10/782894 | 7148644 | 10/778056 |
| 10/778058 | 10/778060 | 10/778059 | 10/778063 | 10/778062 | 10/778061 |
| 10/778057 | 7055739 | 09/575129 | 6830196 | 6832717 | 7182247 |
| 7082562 | 6843420 | 10/291718 | 6789731 | 7057608 | 6766944 |
| 6766945 | 10/291715 | 10/291559 | 10/291660 | 10/409864 | 7108192 |
| 7111791 | 10/786631 | 10/683151 | 10/683040 | 10/778090 | 6957768 |

| | | | | | |
|---|---|---|---|---|---|
| 09/575162 | 09/575172 | 7170499 | 7106888 | 7123239 | 6982701 |
| 6982703 | 10/291538 | 6786397 | 6947027 | 6975299 | 7139431 |
| 7048178 | 7118025 | 6839053 | 7015900 | 7010147 | 7133557 |
| 6914593 | 10/291546 | 6454482 | 6808330 | 6527365 | 6474773 |
| 6550997 | 7093923 | 6957923 | 7131724 | | |

In general, the netpage system relies on the production of, and human interaction with, netpages. These are pages of text, graphics and images printed on ordinary paper, but which work like interactive web pages. Information is encoded on each page using ink which is substantially invisible to the unaided human eye. The ink, however, and thereby the coded data, can be sensed by an optically imaging pen and transmitted to the netpage system.